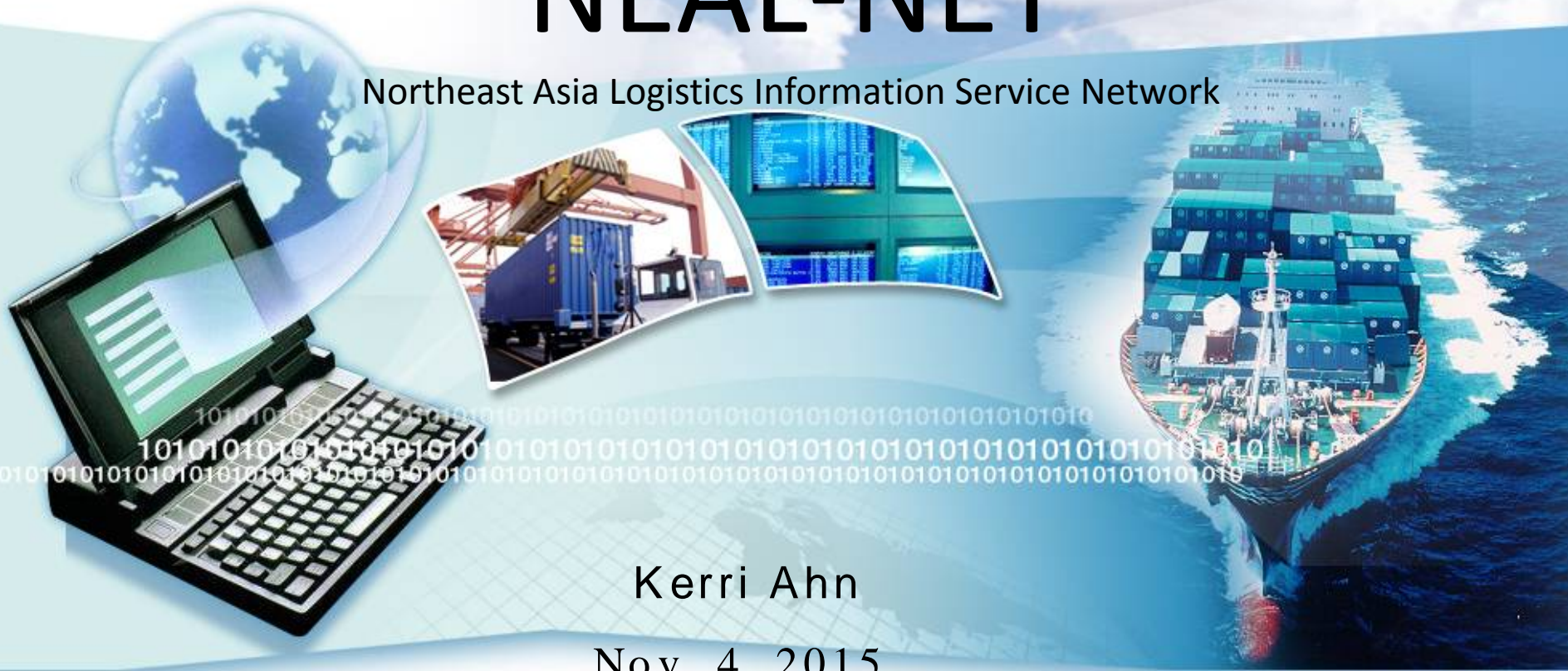


Capacity Building Workshop on Cross-border Paperless Trade Facilitation:
Lessons from On-going Initiatives and Way Forward

NEAL-NET

Northeast Asia Logistics Information Service Network



Kerri Ahn

Nov. 4. 2015.

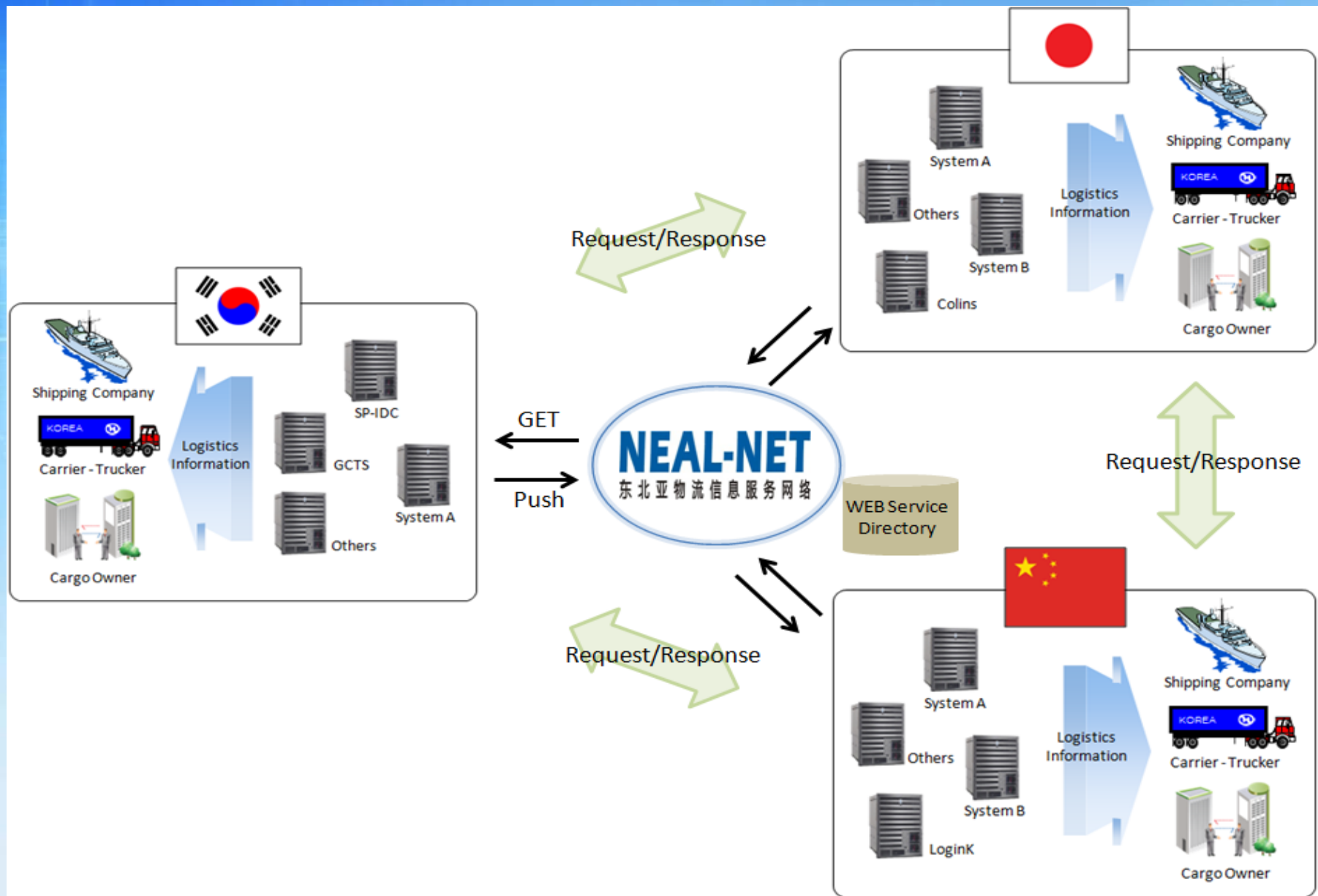
Facilitating logistics information exchange among China, Japan and Republic of Korea

Contents

- I. What is NEAL-NET**
- II. Background**
- III. Key Features**
- IV. Major Challenges**
- V. Future Plan**



What is NEAL-NET



Goal of NEAL-NET

- ❑ **Visibility, Interoperability, Sustainability of Global Logistics**
- ❑ **Enhance NEAL-NET Infrastructure by the advance technology (IoT, Big Data, Cloud, international standards)**
- ❑ **Leading Role in International Standard Activities**



Logistics IT Environment : Real-Time data, Timeliness, Accuracy

Logistics Environment : Complex Network, SCEN, Moving Data

Background - Goal

Enhances logistics efficiency through information exchanging and sharing

- Supports to save time and costs with fast and accuracy information
- Develops a method of interconnecting between information systems and information sharing
- Provides statistics information for logistics data

Develops information standard for NEAL-NET, and propose it to global standard

Performs technical research for how to the standardization of logistics information

File out international collaboration such as exchanging of technology, Training, etc.

Background - Mission

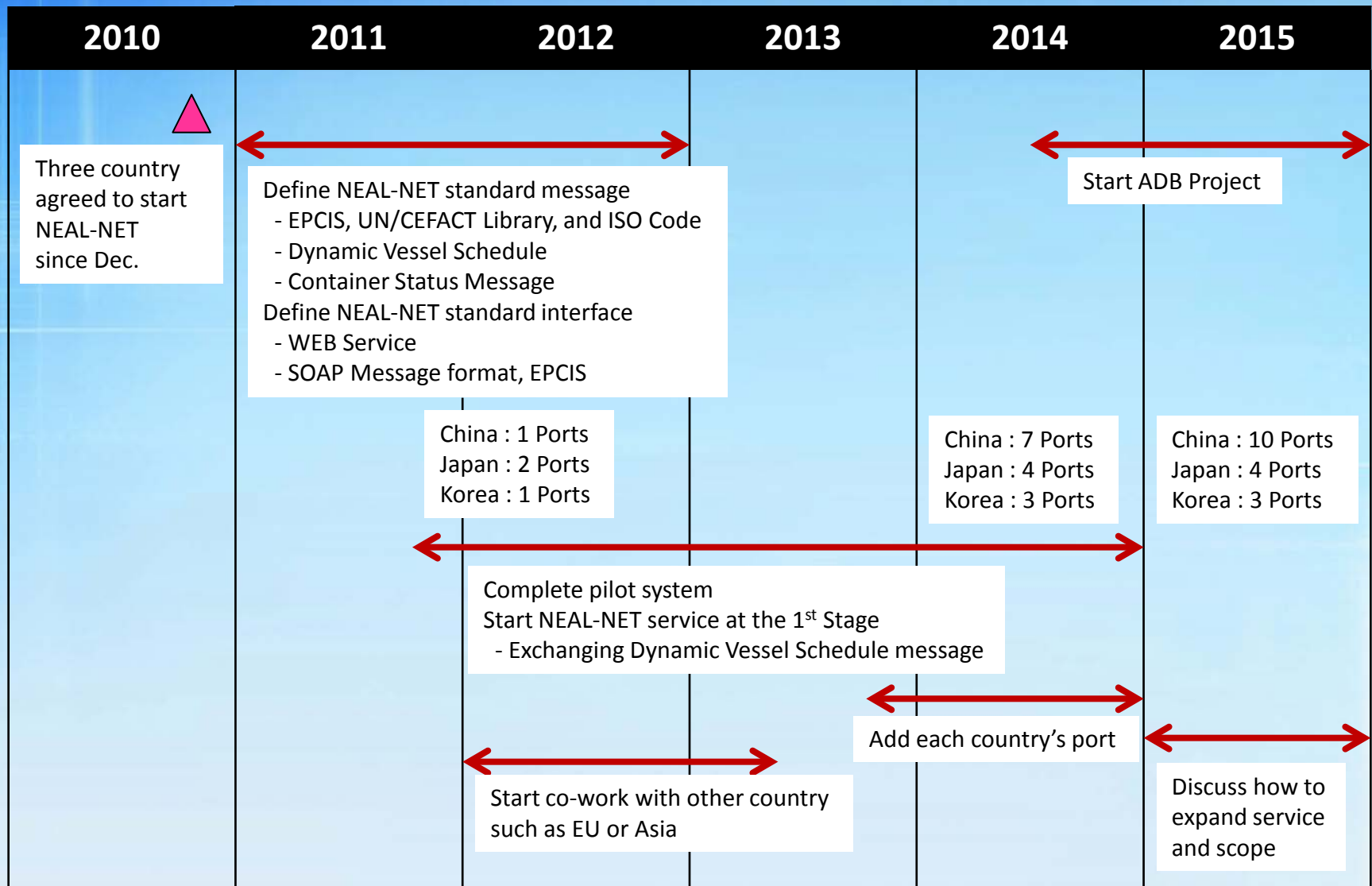
NEAL-NET is a transnational, non-profit cooperative mechanism for logistics information interconnection, exchange and sharing among three countries

- To establish cooperative mechanism for seamless logistics among China, Japan, and Korea
- To improve efficiency and reduce unnecessary expenses in logistics domain
- To set NEAL-NET standard to international logistics standard, and advance its standard using the related IT

Main Task of NEAL-NET for Mission

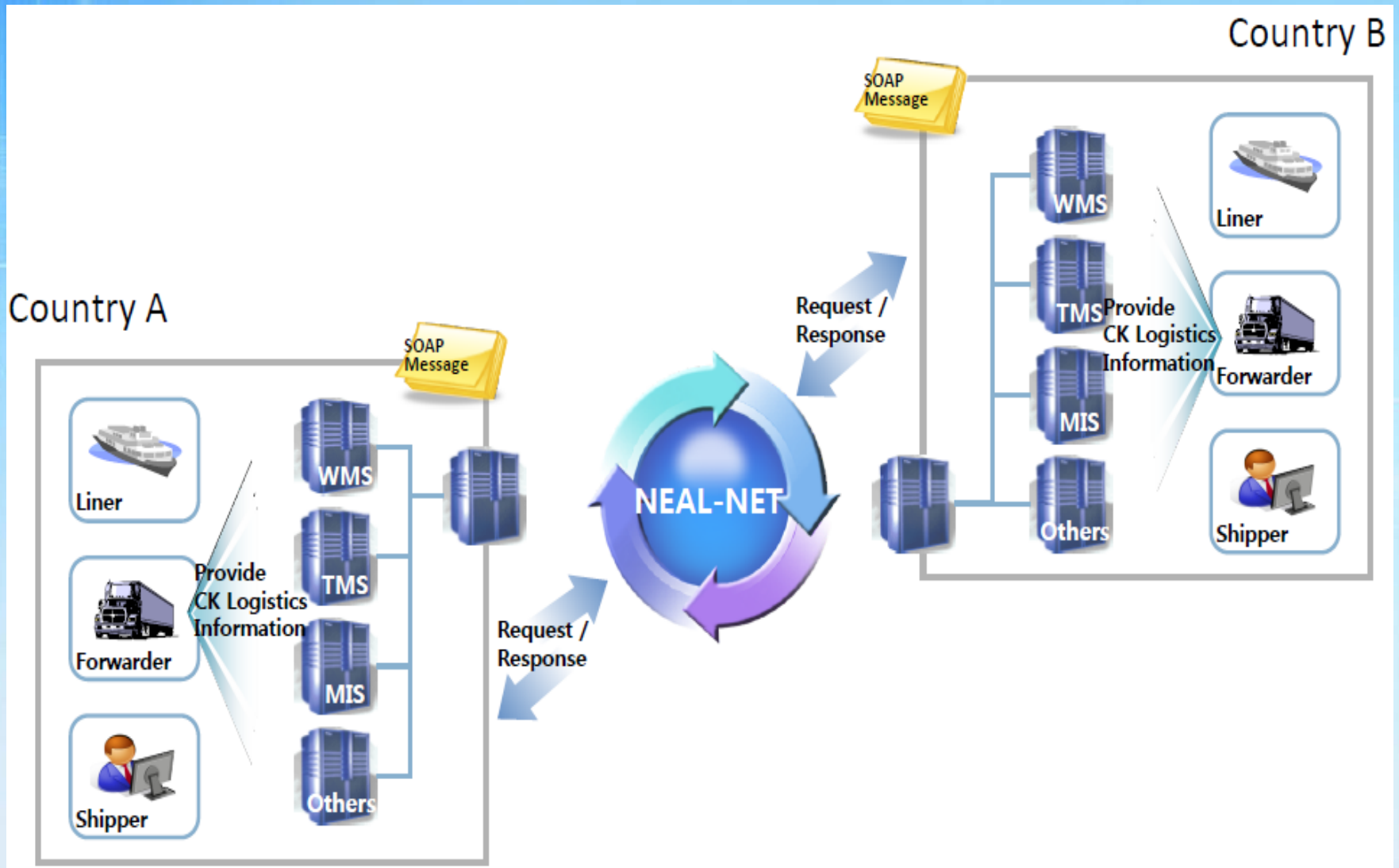
- To interconnect logistics information systems of the three countries
- To encourage researches on logistics information standards and technologies
- To promote technological and standards exchange, training and popularization of logistics information systems

History of NEAL- NET



Key Features

Provide the unified and simple way on exchanging e-documents



Key Features

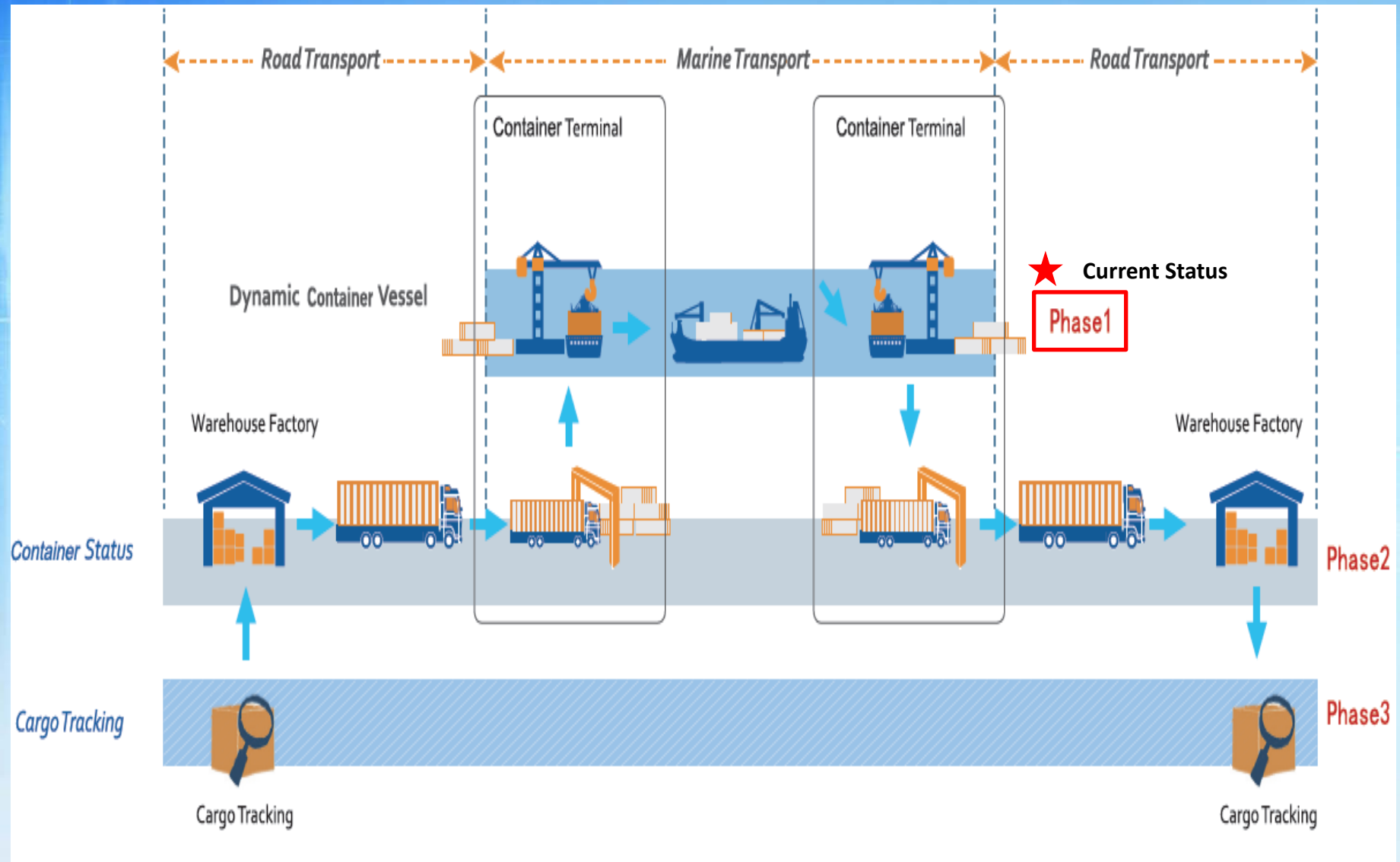
Develop NEAL-NET standard and interface

- NEAL-NET standard is developed with EPCIS standard, and referenced by UN/CEFACT CCTS and ISO Code such as LOCODE or Transport Status.
- NEAL-NET message is conveyed with SOAP message body part and basic transport data with SOAP message header part.
- They define EPCIS event information (eventType and action), what, when, where, why, and extension(contents

Information sharing with real transaction status data

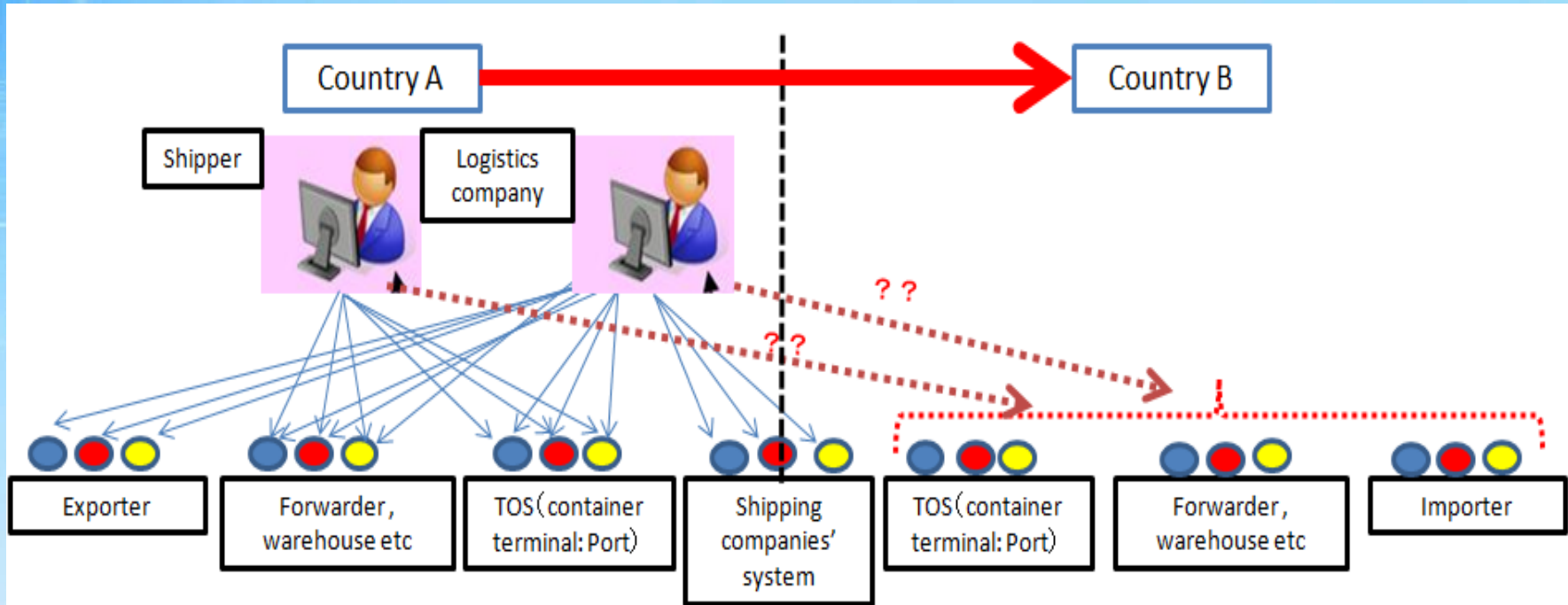
Go ahead global collaboration

Service of NEAL- NET



Major Challenges

Inefficient Logistics Information Exchanging & Sharing Service

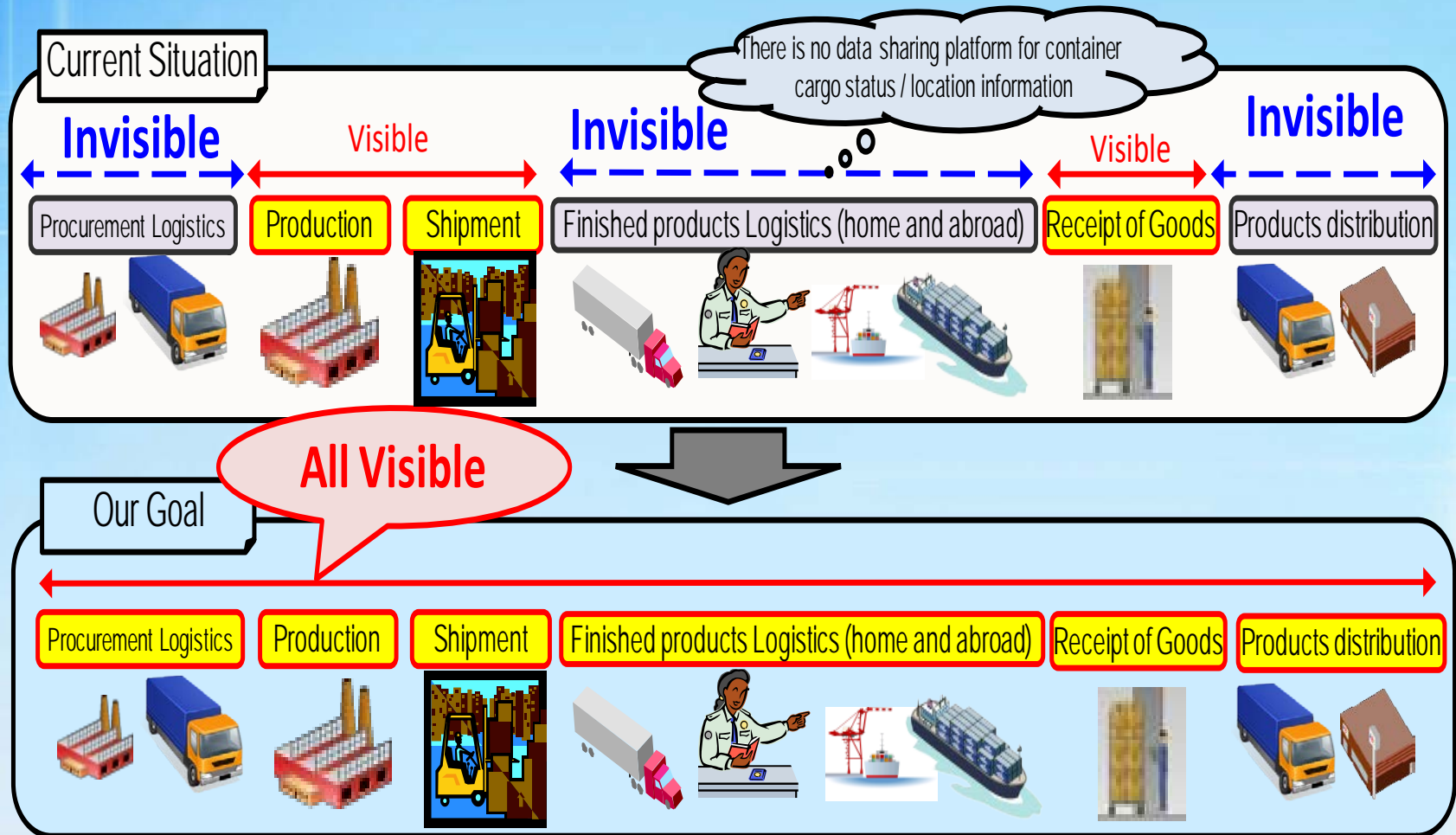


Difficult to provide accurate, real-time, and associated information

Not connected between some business entities

Major Challenges

Difficult to support Seamless Logistics



Major Challenges

Difficult to participate private sector to NEAL-NET

- Most ports and terminals of three countries are managing or operating by private organization not public. (In Korea, by public organization)
- These user don't want to share logistics information with other organizations, just want to receive logistics information

Interoperability

- NEAL-NET standard is developed with EPCIS standard, and referenced by UN/CEFACT CCTS and ISO Code such as LOCODE or Transport Status.
- Therefore, there are some restriction to harmonize with other international standard such as UN/CEFACT, WCO, or ISO 19845(UBL)

Lesson Learnt

Three countries agreed to define National level policy

- signed ministry level MOU among three countries
- agree to develop NEAL-NET standard and interface and to exchange logistic information

NEAL-NET is best practice model

- Few practices of information sharing for government level in logistics domain
- They are sharing real transaction data , this data is sending from their user such as shipping agency, freight forwarder, etc.
- Other body such as EU e-freight or US EFM is interesting to NEAL-NET

Lesson Learnt

Establish an initial version of infrastructure for global supply chain

- Develops message and interface standard
- Develops exchanging method

Success Factor

- Be aware of the need to share logistics information
- Be sure that fast, accurate, secure information management can reduce logistics cost and processing time
- Strengthen cooperation on setting up NEAL-NET standard to be global standard -> need to harmonize with other standard
- Understand and wish for cargo tracking and seamless logistics

Future Plan

Promote NEAL-NET standard application in the three countries and improve NEAL-NET information sharing service continually

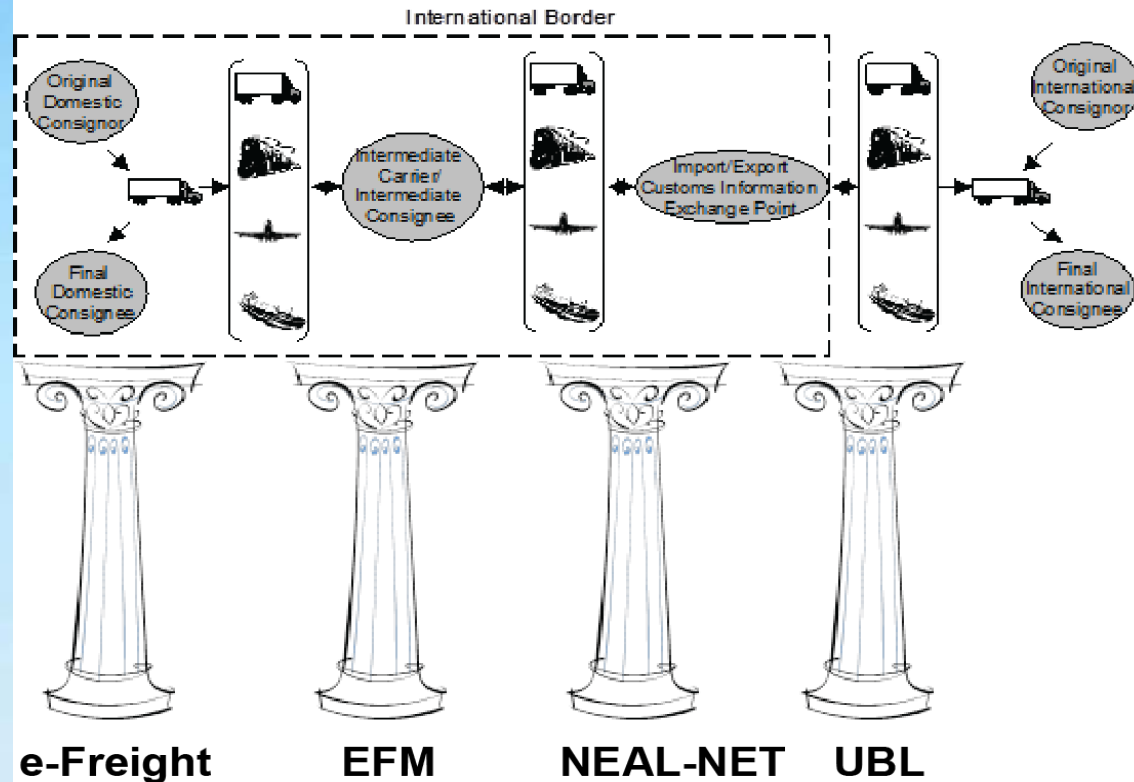
- Joint research project how to use (utilize) the advanced technology such as big data or internet of things in Logistics
- On-demand service : try to provide PUSH service
- User Authentication, Statistics Information

Explore and deepen logistics information sharing service area

- Support intermodal and multimodal transportation including land, sea, railway, and air transportation
- Discuss and research in order to harmonize with other international standard or global collaboration such as EU e-freight or US EFM

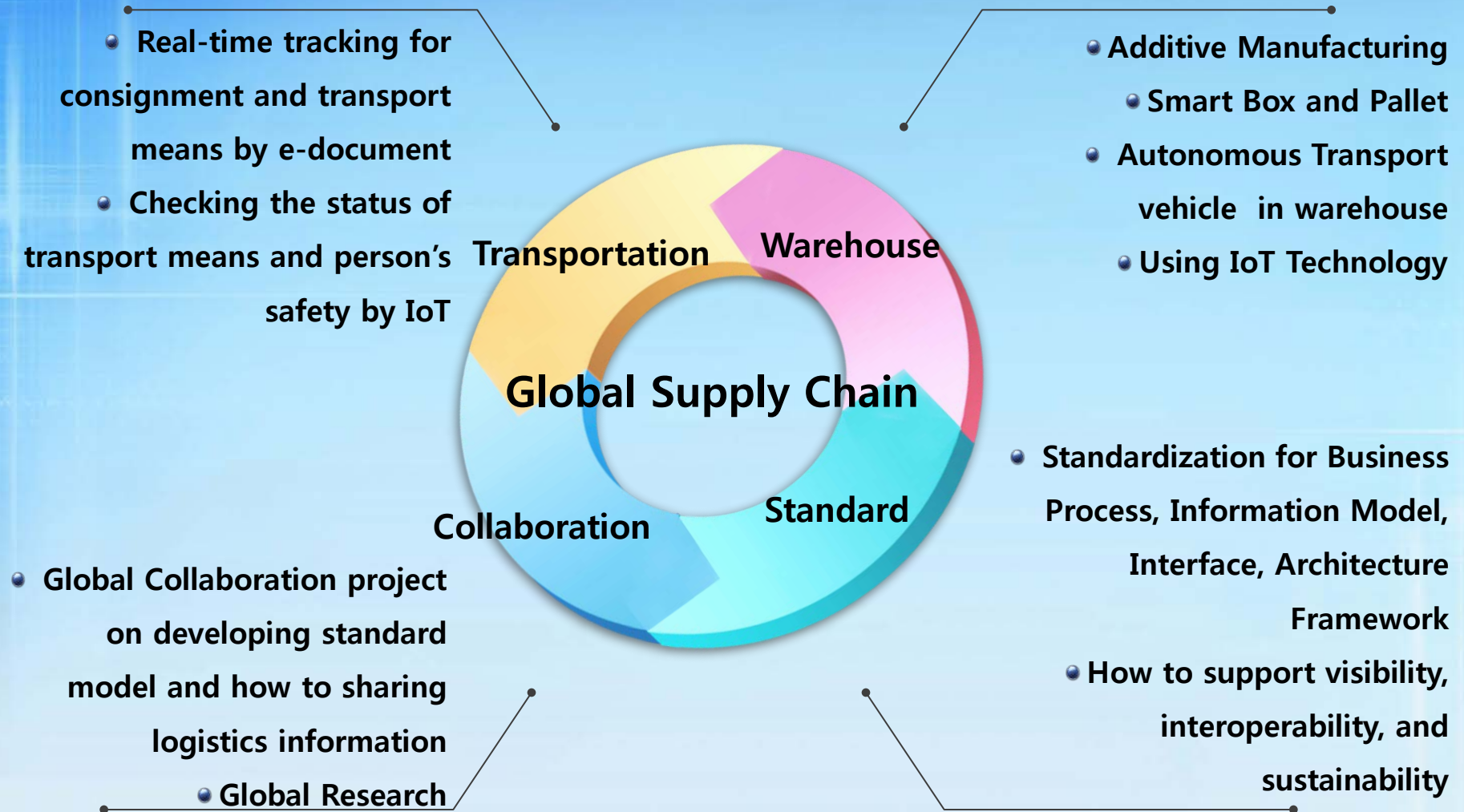
How to Expand ? – Common framework

Promoting the Common Framework Globally



Common Framework
(Harmonized, Global, Standardized)

How to Expand ? — Activities for Global Supply Chain



Conclusion

Vision

Hybrid Society, Creative and Future

Goal

Integrate with Online and offline, Internet of Things in Logistics

Goal II

Policy Issue

- IT-Logistics Business, R&D
- Build Infrastructure
- Global collaboration project

Flexibility

Social Issue

- Safety in Logistics
- Low-Carbon logistics
- Energy-saving

Performance

Technical Issue

- Apply to the advanced technology to Logistics
- Leading at international standard activities

Standard

Initiatives

Interconnect between systems, harmonization between standard model

The background of the slide features a blue-toned image. At the top left, a portion of a globe is visible. Below it, a group of people are shown in a celebratory pose, shaking hands. The overall theme suggests global success or achievement.

Thanks !!!!!!!